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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/998,867

11/29/2001

Ying Wen Hsu

263/288

7758

34313

7590

04/27/2004

ORRICK, HERRINGTON & SUTCLIFFE, LLP  
4 PARK PLAZA  
SUITE 1600  
IRVINE, CA 92614-2558

EXAMINER

HEALY, BRIAN

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 04/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/998,867

Applicant(s)

HSU, YING WEN

Examiner

Brian M. Healy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 52-63 is/are allowed.
- 6) ☒ Claim(s) 1-51 and 64-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date: 04222004

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Allowable Subject Matter***

Claims 52 –63 are allowed over the prior art of record. None of the references of record teaches or suggests the method and apparatus of attenuating an optical signal which further includes a prism coupler coupled between the first and third waveguides with the prism coupler propagating the optical signal between the first and third waveguide and the use of springs attached to the substrate to enable the movement of the movable light transmissive structure, the recited electrode structures and oxide and buffer layers recited in the aforementioned claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 1-6,8,9,10,12,14,15,16-25,28,29,,31-34,41-43,45,46,66-69,71 and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Harman, U.S.P. No. 5,727,099.

Harman 099' teaches (Figs.1-9) a method and apparatus of attenuating an optical signal comprising: a second light transmission structure or optical fiber 28 on a movable (or pivotable/rotatable) platform 26 that moves the second light transmission structure or optical fiber 28 to a first unattenuated position to a second position that attenuates (Note that the amount of attenuation can be total or zero) a light signal propagating in the first light transmission structure 32 or optical fiber via a variable free spaced air gap 30 which clearly, fully meets Applicant's claimed limitations. (Please note that the amended limitations regarding, the movable platform formed by a "semiconductor process" was not given patentable weight for the reasons stated in the "Response to Argument" section.)

Claims 1-51 and 64-73 are rejected under 35 U.S.C. 102(e) as being anticipated by Espindola et. al., U.S.P. No.6,102,582.

Espindola et. al., '582 teaches (Figs.1-9) a method and apparatus for switching and/or attenuating comprising : a movable platform 72 upon which is placed a second light transmissive structure or optical fiber waveguide 71 that moves and/or rotates between first optical fiber transmissive structures 80A,B and a third optical fiber transmissive structure 75A,B wherein there are variable free space air gaps between the first, second and third optical fiber transmissive structures so that light signals are

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either unattenuated, fully or partially attenuated between the first, second and third optical fiber waveguides which clearly, fully meets Applicant's claimed limitations.

### ***Response to Arguments***

Applicant's arguments filed 3/31/04 have been fully considered but they are not persuasive. Applicant's arguments as it applies to the references (Harman and Espindola) appear to stand or fall over the added limitations of that the moveable platform and the actuator are "formed by a semiconductor" process. It is conceded by the Examiner that the applied references do not teach or suggest that the components that forms the attenuator are "formed by a semiconductor process", however this is a method of forming the device that has been placed in an article claim and the patentability of article claims must stand or fall upon article limitations. This is stated in MPEP 2113 which states "[T]he lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, **it is the patentability of the product claimed and not of the recited process steps which must be established.** We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. **As a practical matter, the Patent Office is not equipped to manufacture products by the**

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**myriad of processes put before it and then obtain prior art products and make physical comparisons therewith.” In re Brown, 459 F.2d 531, 535,”**

Applicant also appears to admit in the Specification that the use of “semiconductor processes” to fabricate components for the attenuator is well known. On pages 9 and 10, starting at line 21 of the specification, Applicant states, “There are **several methods of producing a structure** which is capable of being freely suspended; **these methods are well known in the art of micromachining. Materials such as silicon, silica, nitrate and metals have all been made successfully into free-suspending micro-structures. Any appropriate material may be used in the VOA device.”**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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A copy of PTO-1449 will be included in this office action. The following reference has also been made of record in the case by the Examiner: Hsu, U.S. Patent Application Publication No. U.S. 2002/0054748A1 (Note Entire reference.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Healy whose telephone number is (571) 272-2347. The examiner can normally be reached on Compressed Schedule Tues-Thurs. 7AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernik can be reached on (571)272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Brian Healy  
Primary Examiner

Brian M. Healy  
Primary Examiner  
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